April 29, 2010 Training Session

A Cornucopia of Topics

Agenda

Determining wetland impacts in difficult situations
Roles of LGU & SWCD in WCA administration
TEP meetings – the good, bad, and ugly
WCA implementation with limited budget
Where to get the information you need

Level 1 & 2 delineations – what to use when
Wetlands versus creeks, streams, and lakes

Stormwater ponds and WCA
WCA process for public road projects
Options for handling noncompliant replacement

Clean Water Act Jurisdiction:
Requests for JD and delineation approvals

Wetland Mitigation Banks:
Corps approval and review process

Morning Goals

- Learn the definition of wetland impact under WCA and how to apply it.
- Know SWCD and LGU roles in WCA according to the rule.
- Know when and when not to call a TEP and how to run a TEP meeting.
- Learn about efficiency options for implementing WCA.
- Know the levels of wetland delineation and when to apply/require them.

Morning Goals

- Learn some guidelines for differentiating wetlands from other aquatic resources.
- Know how WCA rules apply to stormwater ponds.
- Learn the administrative processes associated with public road projects.
- Learn enforcement compliant options and when to use them.

What is a Wetland Impact under WCA?

Loss of quantity, quality, biological diversity ***caused by*** draining, filling, excavation (semi-perm. flooded of Types 3, 4, 5).

Step 1: Does the activity involve filling, draining, or excavating of a wetland?

Step 2: Does the filling, draining, or excavating result in a loss of quantity, quality, or biological diversity?

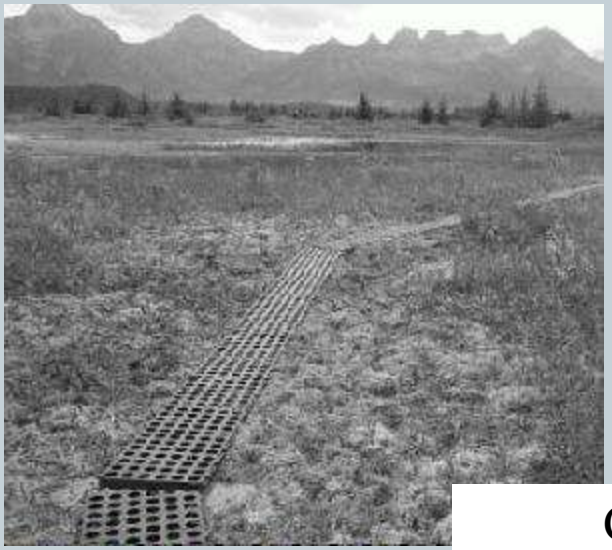
Wetland Impact Determination

Porous material example (Geoblock):

Wetland Impact Determination

Is it wetland fill? Does it alter the cross-section or hydrologic characteristics, obstruct flow patterns, change wetland boundary, or convert wetland to nonwetland?

May depend on the type of proposed use.



Walking path with minimal compaction versus high use ATV trail with high compaction.

Could be partial impact

Wetland Impact Determination

Thin layer of sediment in riparian wetland. Will this significantly alter the hydrologic characteristics of this wetland? Will it change the quantity, quality, biological diversity?

Will a proposed gravel pit next to these wetlands alter hydrology? Will it change the quantity, quality, biological diversity?

Roles of the LGU and SWCD in WCA

The following is a quick review of the roles of the LGU and SWCD as determined in rule and statute. Note that these roles will vary from place to place depending on delegation, contracts, and agreements between LGUs and SWCDs.

Roles of the LGU and SWCD in WCA

SWCD

Information Clearinghouse – provide general public with info on wetlands and WCA rule.

TEP – serve on TEP to provide technical expertise on all WCA matters as requested.

Exemption/No-Loss – review and certify soil & water conservation projects and wildlife habitat projects for exemption applicability.

Roles of the LGU and SWCD in WCA

SWCD

Enforcement – inspect violation sites that have been issued a C&D and a restoration order is determined to be needed, consult with LGU and DNR , prepare restoration or replacement order, certify compliance with restoration/replacement orders.

Roles of LGU & SWCD in WCA

LGU

TEP– coordinate TEP meetings (arrange time/date/place, record minutes, prepare findings)

Exemption/No-Loss – issue decisions

Replacement/Banking Plans – notice applications, issue decisions

Wetland Delineations – notice applications, issue decisions

Roles of the LGU & SWCD in WCA

LGU

Replacement Wetland Monitoring– collect and track required monitoring reports, certify replacement wetland construction, order corrective actions, coordinate TEP for final approval, release escrow

Enforcement – investigate potential violations when an ICR (initial case report) is issued by DNR, process any application related to an enforcement order, assist SWCD in restoration/replacement order preparation.

Reporting – report annual activities via required form. This used to be a function of SWCD, now required of all LGUs.

TEP Meetings

TEP Meetings

What is a TEP meeting for?

- Provide recommendations to the LGU on applications
- Provide pre-application feedback to applicants
- Make determinations on wetland monitoring, sequencing flexibility, and certain aspects of WCA (such as ENRV eligibility).
- **Don't** use a TEP meeting to implement WCA! TEP should not replace LGU administration of the program, it should support and assist it.

TEP Meetings

Pre-application TEP meetings:

- Should be conducted at the beginning of project planning (at the “bumwad” stage), not the end.
- **Don’t** use pre-application TEP meetings to get ammunition for an application! If you have already decided on the plan, don’t waste the TEP’s time, just submit the application.

TEP Meetings

Running a TEP meeting:

- Designate someone to run the meeting (typically the LGU representative, but can be any TEP member).
- Designate someone to take notes.

Running a TEP Meeting

- Have an agenda and follow it.
- Take care of business first, chit chat later.
- If a project requires a field review, try to do it on the same day as the discussion.
- Check emotions at the door.

Running a TEP Meeting

- Be sensitive to everyone's schedules, but at some point you have to set a meeting date (be aware of 15.99 timeline requirements).

- Decide whether or not the TEP is going to have <u>findings and a recommendation</u>, or if there is just going to be minutes to share. It is up to the TEP. If just minutes, probably don't need TEP signatures. Formal findings and recommendations should be accompanied by TEP signatures.

Poll "Kickoff meeting"

Initiated by mn.
Agenda:
1) Kick
2) off
3) what next

Summary:

Number of participants:	13
Most popular date:	several
Earliest of which:	Tuesday, September 11, 2007
Votes in favor:	6
Latest activity:	10 minutes ago

Enter your name in the text box below and cast your vote by ticking the corresponding checkboxes. Click the "Participate" button to save the information.

	September 2007				October 2007	
	Fri 7	Tue 11	Thu 20	Wed 26	Wed 10	Wed 17
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Stalin		OK	OK	OK		
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Franz				OK		OK
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Your name						
Count	3	6	6	3	5	4

Participate

Other Things about TEP Meetings

- Invite the Corps project manager to meetings and keep them informed. It is to everyone's benefit to coordinate with other regulatory agencies.

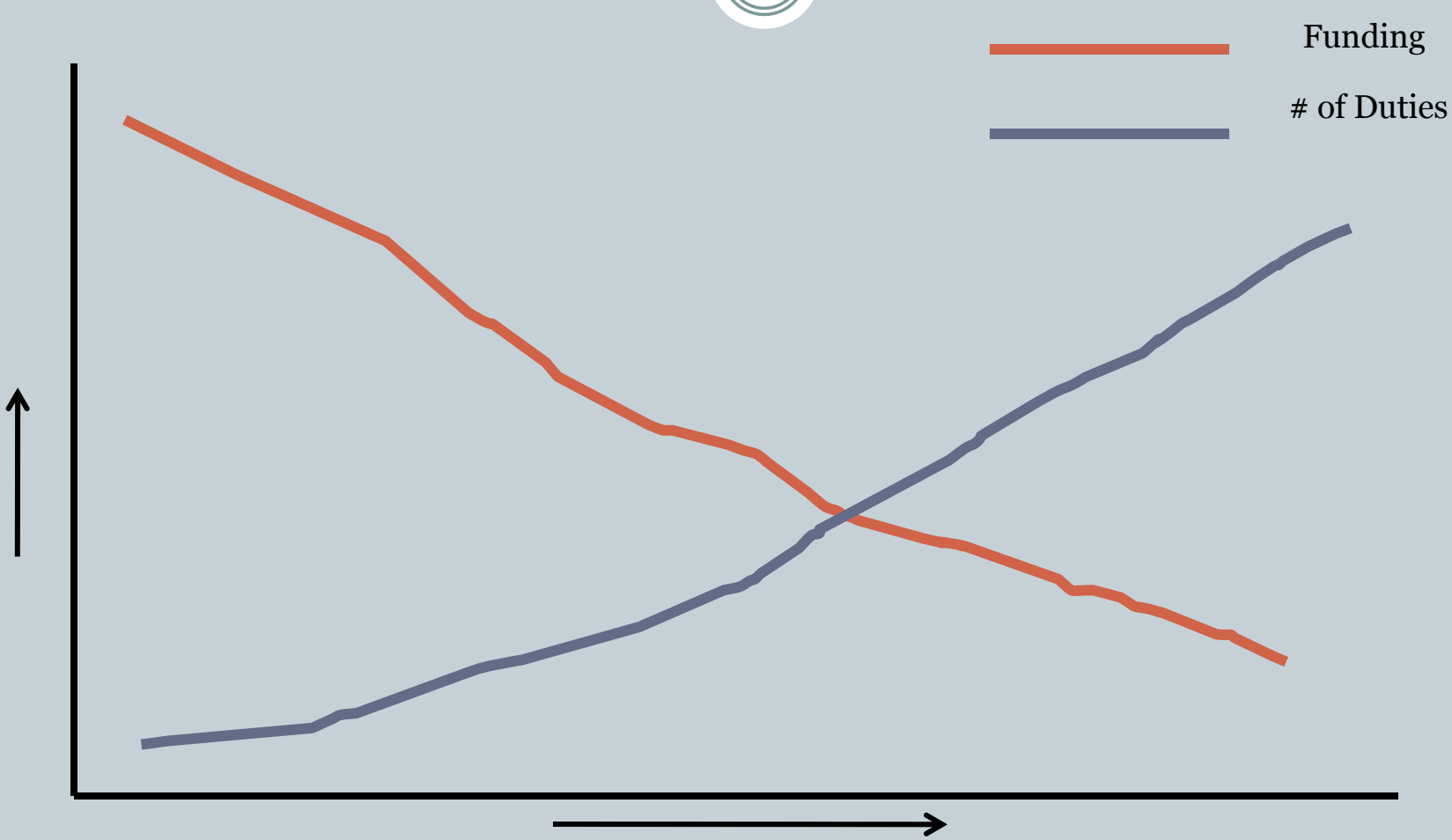
- The TEP is not limited to discussion of a certain set of topics. For example, if the TEP meets to review a wetland delineation, they may also comment and provide recommendations on potential projects that may occur on the property even if the applicant has not applied or requested such input.

Other Things About TEP Meetings

- The TEP is not subject to open meeting laws as they are generally an advisory body, not a formal decision maker.

- While it is often necessary and preferable to have the applicant and/or consultant at the TEP meeting, there may be times where the TEP will need to meet without them present.
  - When applicant/consultant hinders TEP discussion.
  - When discussion is short and/or noncontroversial.
  - When discussion has the potential to offend applicant for whatever reason.
  - When the TEP has significantly different opinions that must be reconciled in order to formulate a recommendation.

Implementing WCA with Limited $$$



Implementing WCA with Limited $$$

Some Facts:

- WCA is heavy on process (notices, timelines, etc.).
- WCA has an administrative side (processing the paperwork, arranging meetings, etc.) and a technical side (delineation reviews, restoration plans, monitoring, etc.).
- There are many LGUs (300+), some have very sporadic WCA activity, others have a lot of activity.
- The WCA staff of many LGUs has many other responsibilities outside of WCA implementation.

Implementing WCA with Limited $$$

- The WCA rule is long and complicated (exemptions, replacement ratios, replacement standards, bank service areas, siting criteria, etc.).
- It takes a concerted effort to know and keep current on the administrative and technical aspects of WCA. Plus the LGU must commit $$$ to keep staff trained.
- Small projects with minimal consequences often take the most time.

Implementing WCA with Limited $$$

- Funding for WCA implementation has decreased along with everything else. Of course overall WCA activity has also decreased.

Implementing WCA with Limited $$$

Options to Consider:

- Consolidation and sharing of resources.
  - Consider delegation. LGUs with limited resources can delegate all or some of their WCA duties to other entities with qualified staff. There are many options:
    - Delegate decision authority
    - Delegate technical representation
    - Delegate administrative processing
    - Any combination of the above
  - Several LGUs could use one person to do some tasks for each LGU. This may be a cheaper option than keeping in-house staff.

Implementing WCA with Limited $$$

- Develop templates and form letters to save time.

Dear Applicant,

We have received your application for _____. It is currently incomplete because _____. You must provide the following _____ to make your application complete.....

Dear Applicant,

As requested we have conducted a preliminary review of your potential project to _____. It appears that your project would require insert type of WCA approval. The following process is required to receive a formal decision: _____....

Wetland Application Checklist:

City application form
Application Fee
2 copies of plans
Etc.

Wetland Application Processing:

Step 1: application rcvd.
Step 2: appl. completeness determination within 15 days.
Step 3: ……..

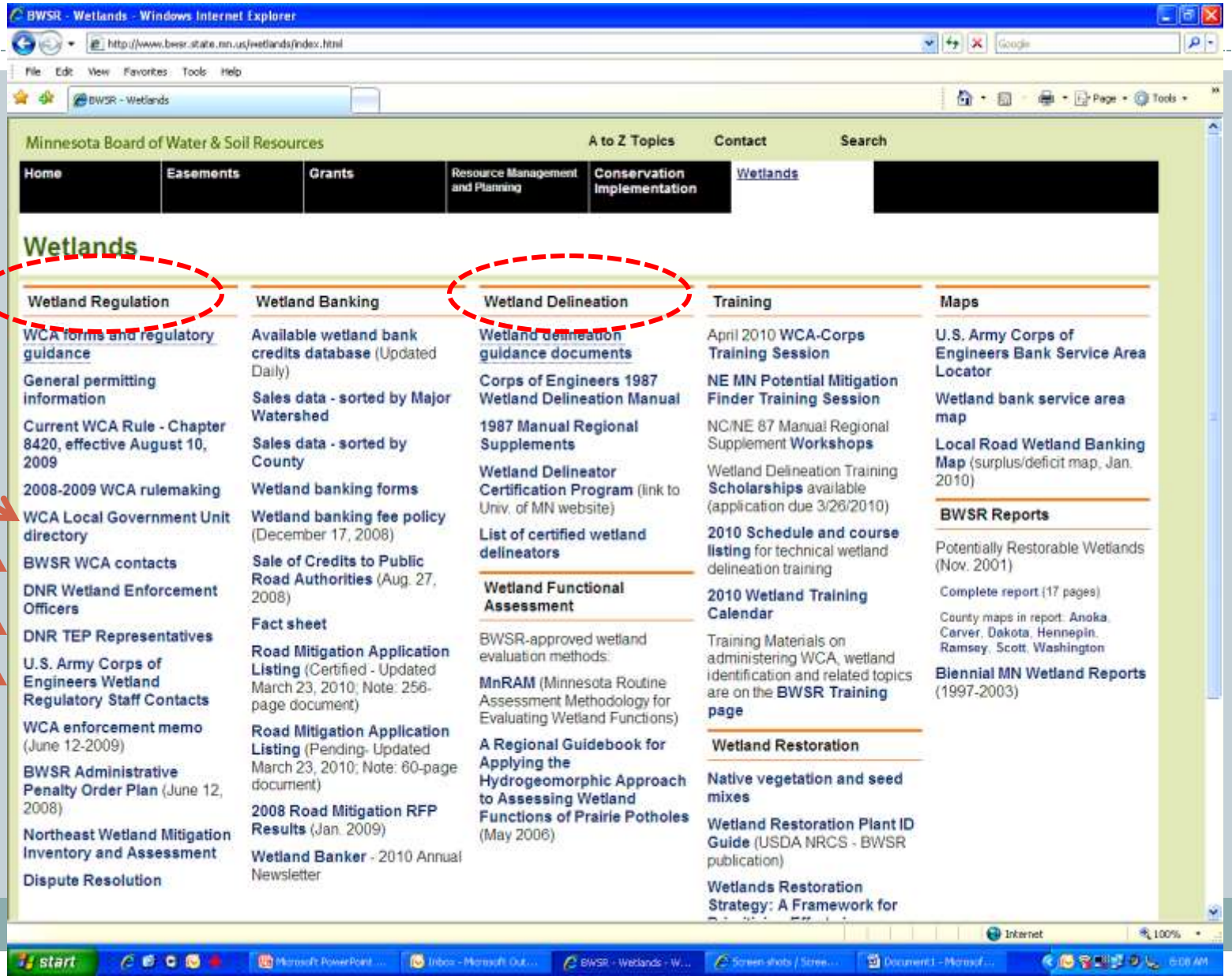
Implementing WCA with Limited $$$

- Don't ask for information you don't need.
  - For example, don't necessarily need a wetland delineation if there is clear qualification for an activity-based exemption (ag exemptions) or an incidental wetland, etc.
- Standardize TEP review procedures with TEP members.
  - We will have a monthly scheduled TEP… we will only have a TEP on these type of projects… we will informally notice exemption/no-loss applications…. Etc……..

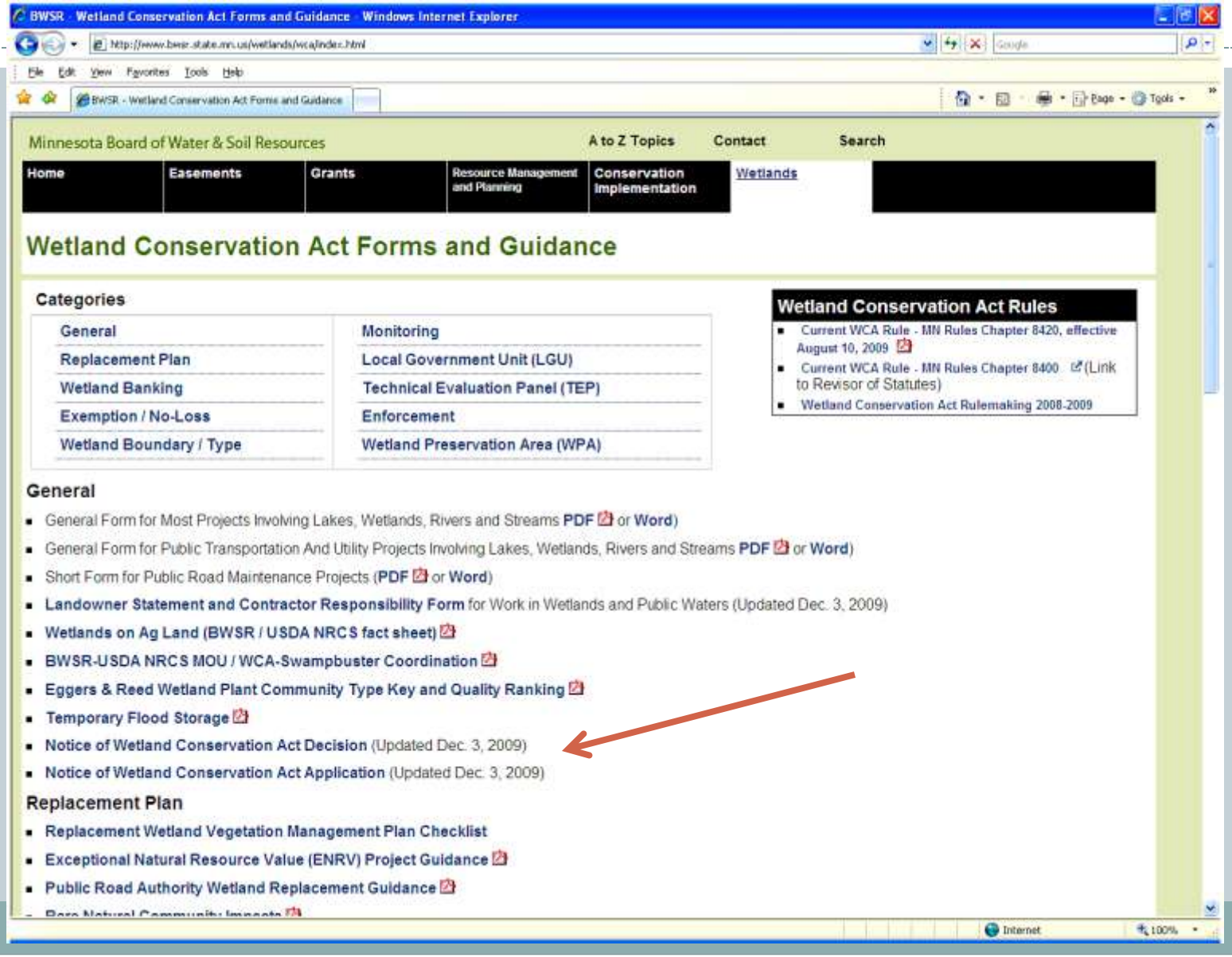
Implementing WCA with Limited $$$

- Prioritize
  - Enforcement Example: If you have 12 noncompliant projects, rank :
    - which ones have the greatest resource impact
    - which ones can be easily resolved versus difficult
    - which ones have accessible landowners/agents versus those that do not
    - which ones have sufficient surety versus those that do not
  - Use these and other criteria to determine where to focus your limited time and resources.

WCA Information

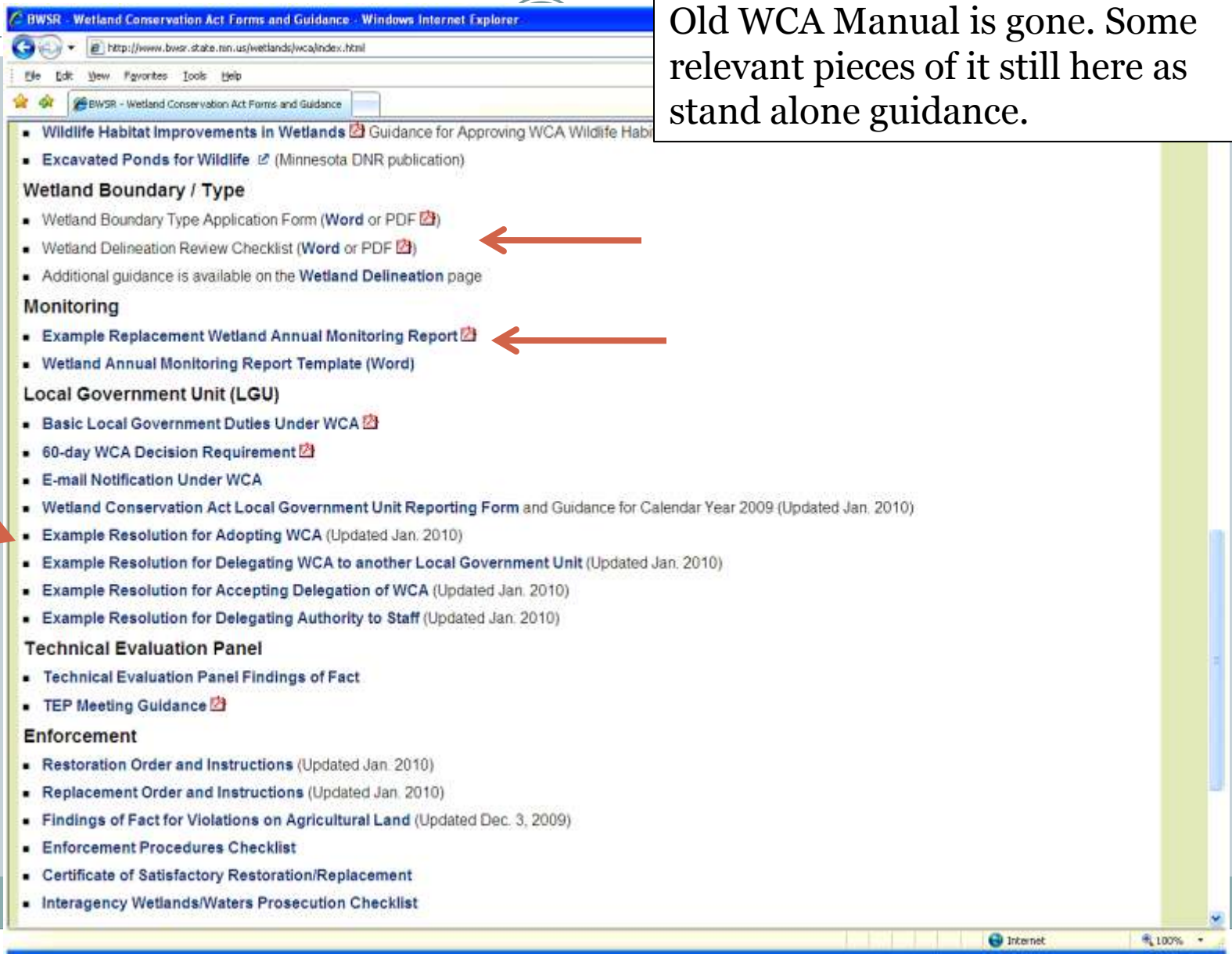


WCA Information

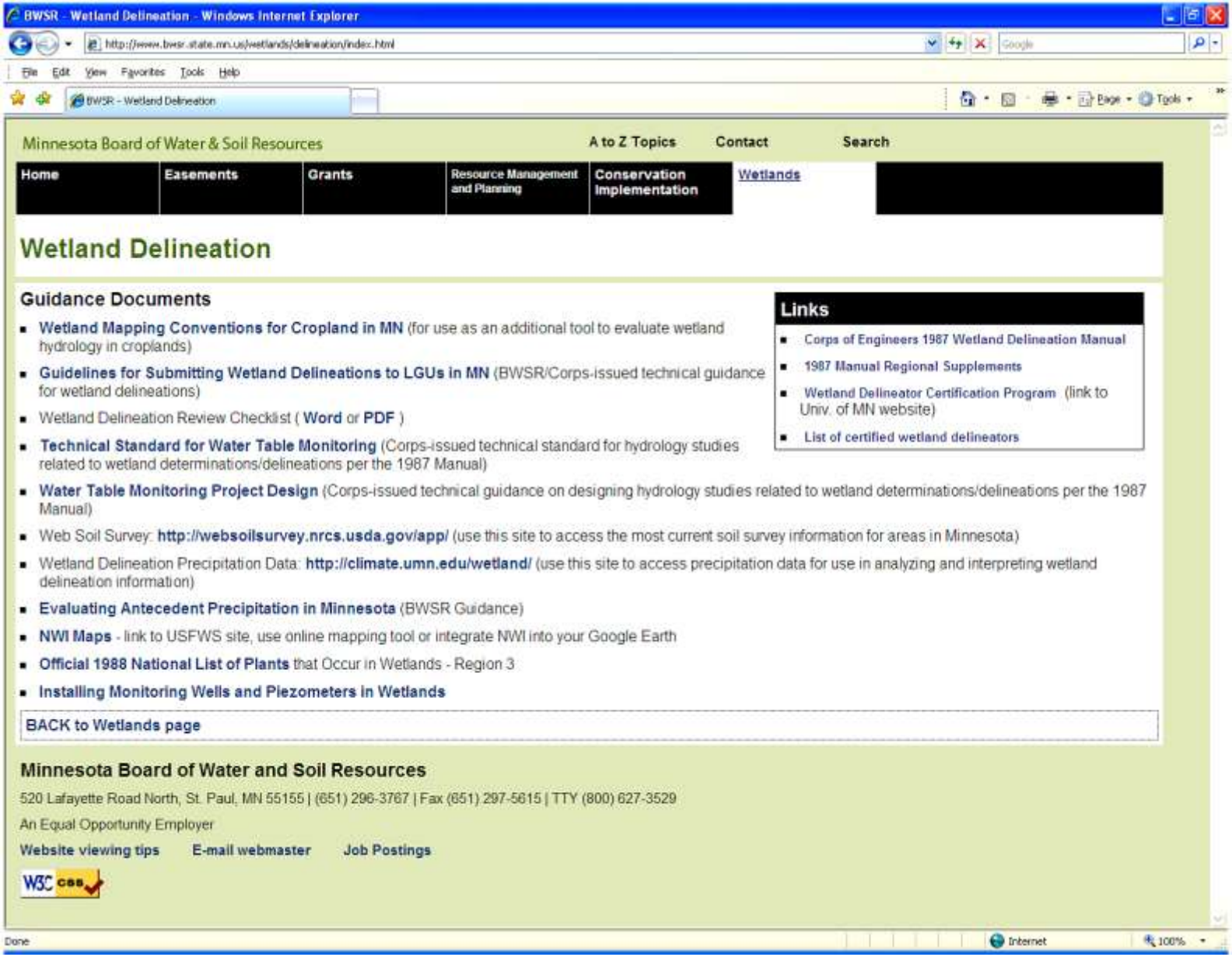


WCA Information

Old WCA Manual is gone. Some relevant pieces of it still here as stand alone guidance.



WCA Information



BWSR - Wetland Delineation - Windows Internet Explorer

http://www.bwsr.state.mn.us/wetlands/delineation/index.html

File Edit View Favorites Tools Help

BWSR - Wetland Delineation

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Wetland Delineation

Guidance Documents

- **Wetland Mapping Conventions for Cropland in MN** (for use as an additional tool to evaluate wetland hydrology in croplands)
- **Guidelines for Submitting Wetland Delineations to LGUs in MN** (BWSR/Corps-issued technical guidance for wetland delineations)
- Wetland Delineation Review Checklist (**Word** or **PDF**)
- **Technical Standard for Water Table Monitoring** (Corps-issued technical standard for hydrology studies related to wetland determinations/delineations per the 1987 Manual)
- **Water Table Monitoring Project Design** (Corps-issued technical guidance on designing hydrology studies related to wetland determinations/delineations per the 1987 Manual)
- Web Soil Survey: **http://websoilsurvey.nrcs.usda.gov/app/** (use this site to access the most current soil survey information for areas in Minnesota)
- Wetland Delineation Precipitation Data: **http://climate.umn.edu/wetland/** (use this site to access precipitation data for use in analyzing and interpreting wetland delineation information)
- **Evaluating Antecedent Precipitation in Minnesota** (BWSR Guidance)
- **NWI Maps** - link to USFWS site, use online mapping tool or integrate NWI into your Google Earth
- **Official 1988 National List of Plants** that Occur in Wetlands - Region 3
- **Installing Monitoring Wells and Piezometers in Wetlands**

Links

- Corps of Engineers 1987 Wetland Delineation Manual
- 1987 Manual Regional Supplements
- Wetland Delineator Certification Program (link to Univ. of MN website)
- List of certified wetland delineators

BACK to Wetlands page

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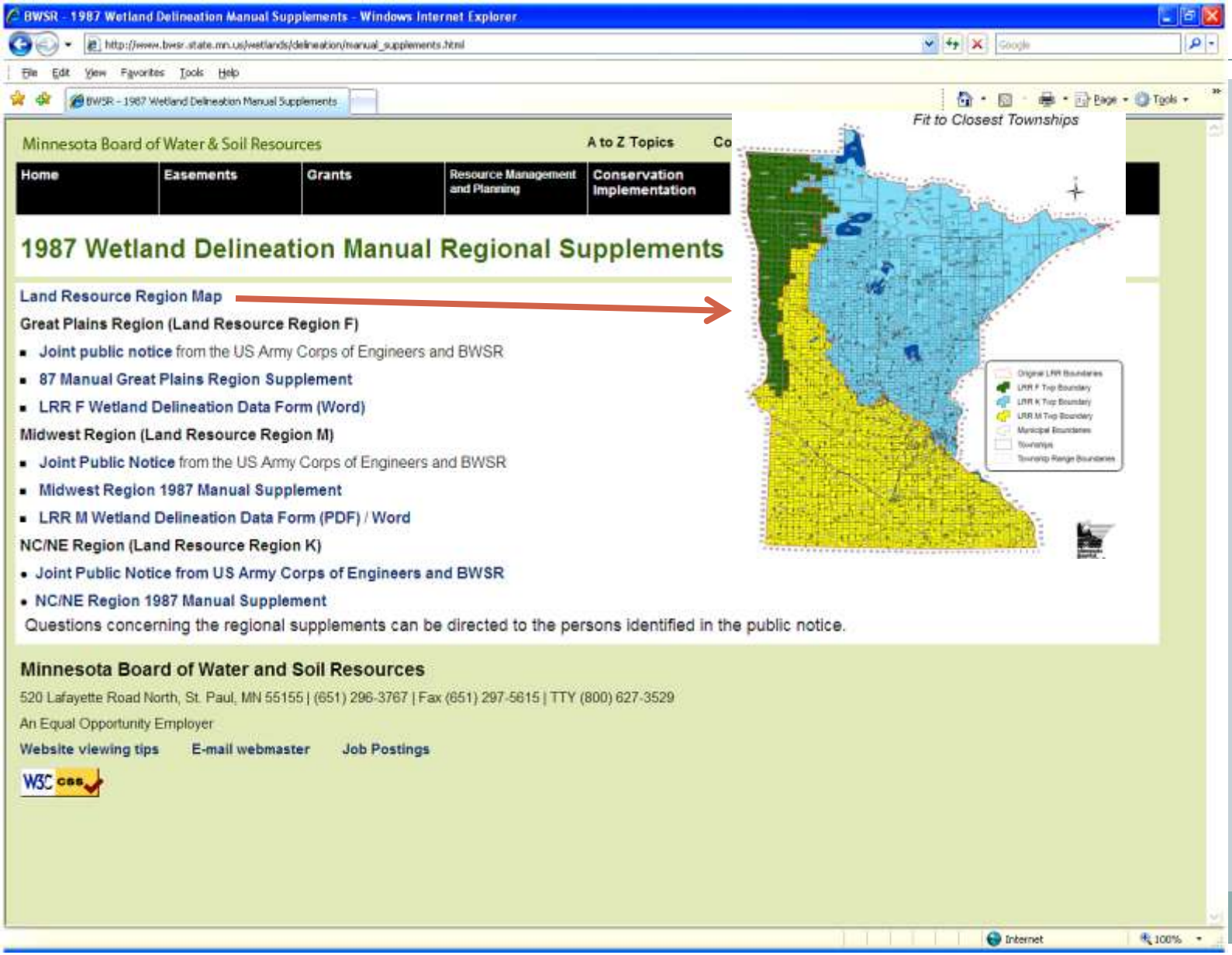
WCA Information



What Level of Delineation to Use When

Wetland Delineation Types

The 87 Manual describes two general types of delineation methods: **routine** and **comprehensive**.

Routine – qualitative data (pick representative sample points, use estimates)

Comprehensive – quantitative data (systematic sampling, more direct and precise measurements)

Wetland Delineation Types

Comprehensive delineation method

- Use when the project area is very complex or when a determination requires rigorous documentation.
- The applicant and TEP should agree to the exact methodology prior to beginning the field work.
- Keep in mind that the comprehensive method can be used in combination with routine methods, depending on the parameter (vegetation, soils, hydrology) that requires greater documentation.

Wetland Delineation Types

Some examples where the comprehensive method *may* be appropriate for WCA purposes:

- The applicant and TEP disagree on delineation and further data collection using the routine method cannot, or could not, resolve the dispute. For example, a complex site where the selection of sampling point locations has a significant influence on the result.

- The decision on a project is, or is likely to be, challenged in court. Often requires more rigorous data collection and documentation to support conclusions.

Wetland Delineation Types

The routine delineation method includes three options, or "levels," for investigation of the site:

- **Level 1** - Onsite Inspection Unnecessary

- **Level 2** - Onsite Inspection Necessary

- **Level 3** - Combination of Levels 1 and 2

Wetland Delineation Types

- **Routine Level 1**: Onsite inspection unnecessary.
- Generally used when the exact wetland boundary is not critical.
- Often used to determine wetland type, although in many cases an on-site inspection may be necessary.
- Typically consists of an examination of common offsite mapping resources (soils, topography, NWI, aerial photos, etc.) to determine the potential presence of a wetland, identify its type, and/or sketch its approximate boundaries.

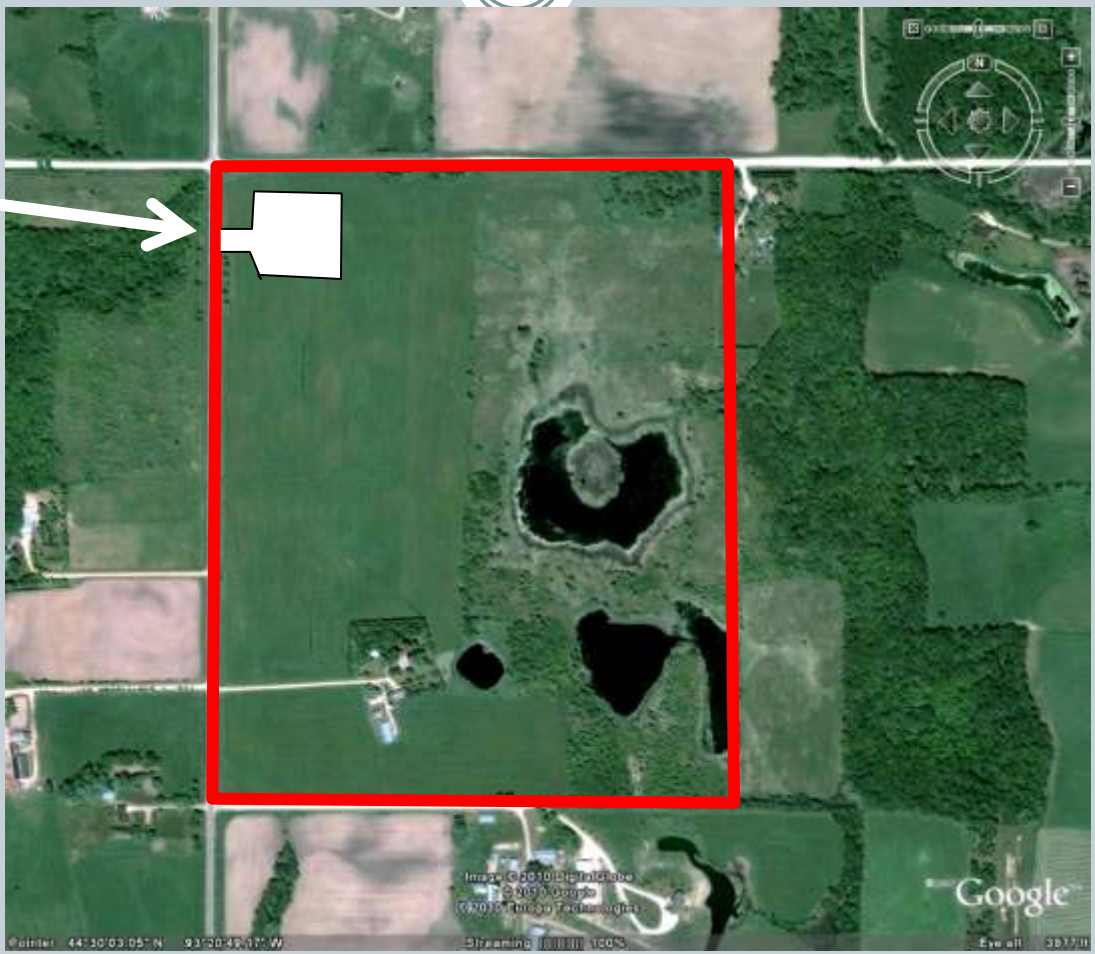
Routine Level 1 Examples

Evaluating incidental applicability for entire wetland – Routine 1 or no delineation necessary

Pipeline repair through large wetland complex involving temporary impacts

Routine Level 1 Example

Proposed Shed



Routine Level 1 Examples

Evaluation of activities in a wetland that was planted with crops 6 of last 10 yrs prior to 1991 (Ag exemption category) – Routine 1 or no delineation necessary

Proposed road improvement project through large bog

Wetland Delineation Types

Routine Level 2

- Involves the onsite collection of field data and the physical marking (staking) of wetland boundaries.

- Used when an accurate wetland boundary is critical for the implementation of WCA, and is used in most WCA situations where permanent wetland impacts are proposed to occur (or potentially could occur) and wetland replacement may be required.

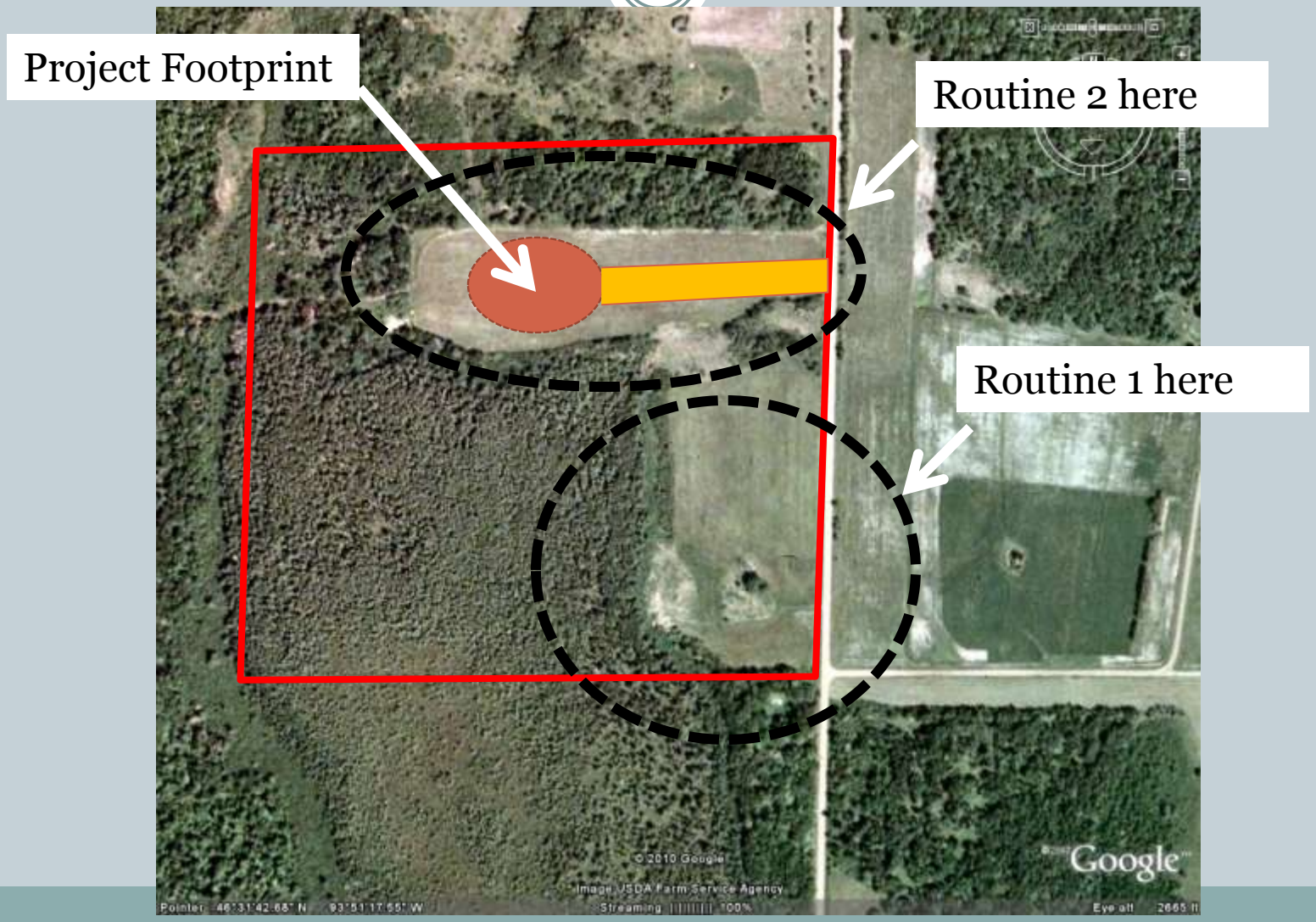
- Used when landowners want to know the land-use constraints of their property and seek assurance through a formal wetland boundary approval.

Routine Level 2 Examples

Evaluating incidental exemption for portion of wetland

Proposed development next to wetlands

Routine Level 3 Example



Wetland Delineation Type

In all cases, the selection of the appropriate delineation method and level should be coordinated between the applicant and LGU/TEP.

The need for a delineation, and the appropriate method/level, depends on the amount of specificity and documentation necessary to achieve the purpose and make a decision.

Regardless of the method or level used, the delineation results should include a description of techniques and materials utilized and a basis for the determination made. As with many aspects of the 87 Manual, **common sense and good judgment is essential**.

Wetland, Creek, Stream, Ditch, Lake

Wetland, Creek, Stream, Ditch, Lake

Wetlands are 1 of 6 categories of “special aquatic sites”.

- Mudflats
- Sanctuaries & Refuges
- Vegetated shallows
- Coral reefs
- Riffle & pool complexes

No rooted veg.

Rooted aquatic veg.

Steep gradient sections of streams

Wetland, Creek, Stream, Ditch, Lake

Key differences between wetlands and other aquatic sites:

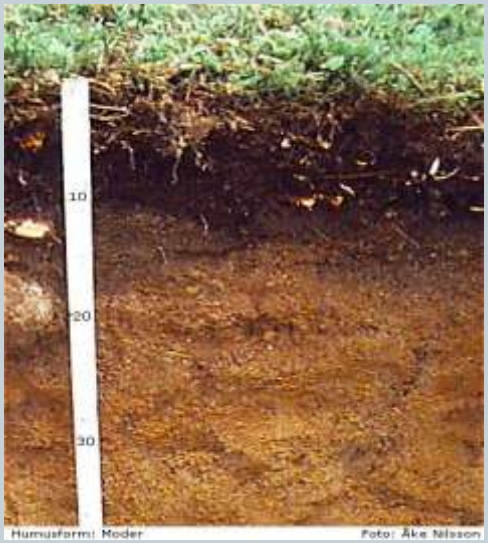
- Presence of vegetation (typically rooted, emergent veg.) under normal circumstances
- Presence of soil

Wetland, Creek, Stream, Ditch, Lake

Rooted vegetation is easy to see, but some assumptions have to be made about normal circumstances when veg has been removed by man (farming, scraping, etc.) or by natural event (extreme flood event, tornado, etc.).

Wetland, Creek, Stream, Ditch, Lake

Soil by definition must exhibit the effects of environmental factors (climate, microorganisms, etc.) on mineral or organic material to the extent that there are horizons (or layers) distinguishable from the parent material and must support rooted plants.



Wetland, Creek, Stream, Ditch, Lake

Lakes – So lakes and other deepwater habitats (>6.5 ft avg. depth) don't have soil because the bottom is unconsolidated and it does not support rooted plants.

Wetland, Creek, Stream, Ditch, Lake

Rivers & Streams -

Sandbars in rivers and streams (although often wet), undergo shifting and re-depositing such that soil does not develop and rooted plants establish only temporarily when waters are low.

Wetland, Creek, Stream, Ditch, Lake

Rivers & Streams – When the water slows down, areas "stagnate", soils form, and plants take root.

Wetland, Creek, Stream, Ditch, Lake

Rivers & Streams – key characteristics to separate them from wetlands:

- Flow Rate – slow moving streams stagnate and wetlands can develop. Fast moving streams don't.

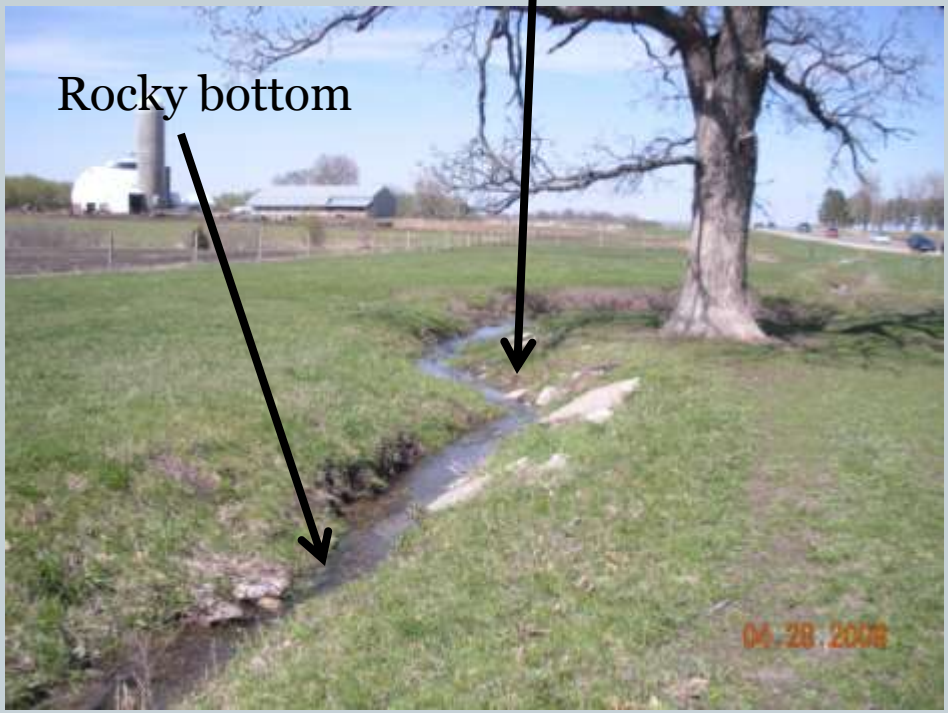
- Flow frequency – streams with more constant flow and/or water residence time may develop into wetlands while those with infrequent flow (flashy) and little water residence time don't.

Wetland, Creek, Stream, Ditch, Lake

Rivers & Streams – What to look for (nonwetlands)

Incised channel

Rocky bottom



Washouts and other signs of flashy, intermittent hydrology

Wetland, Creek, Stream, Ditch, Lake

Rivers & Streams – What to look for (nonwetlands)

Erosion due to high, flashy flows

Areas of deposition characteristic of streams

Lack of emergent veg in channel

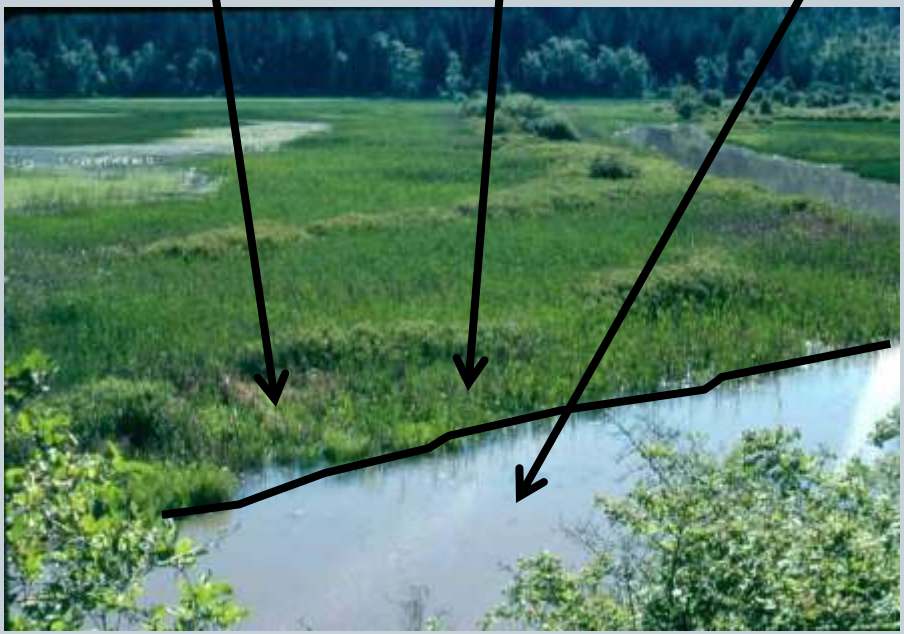
Wetland, Creek, Stream, Ditch, Lake

Rivers & Streams – What to look for (wetlands)

Emergent veg in wet zone

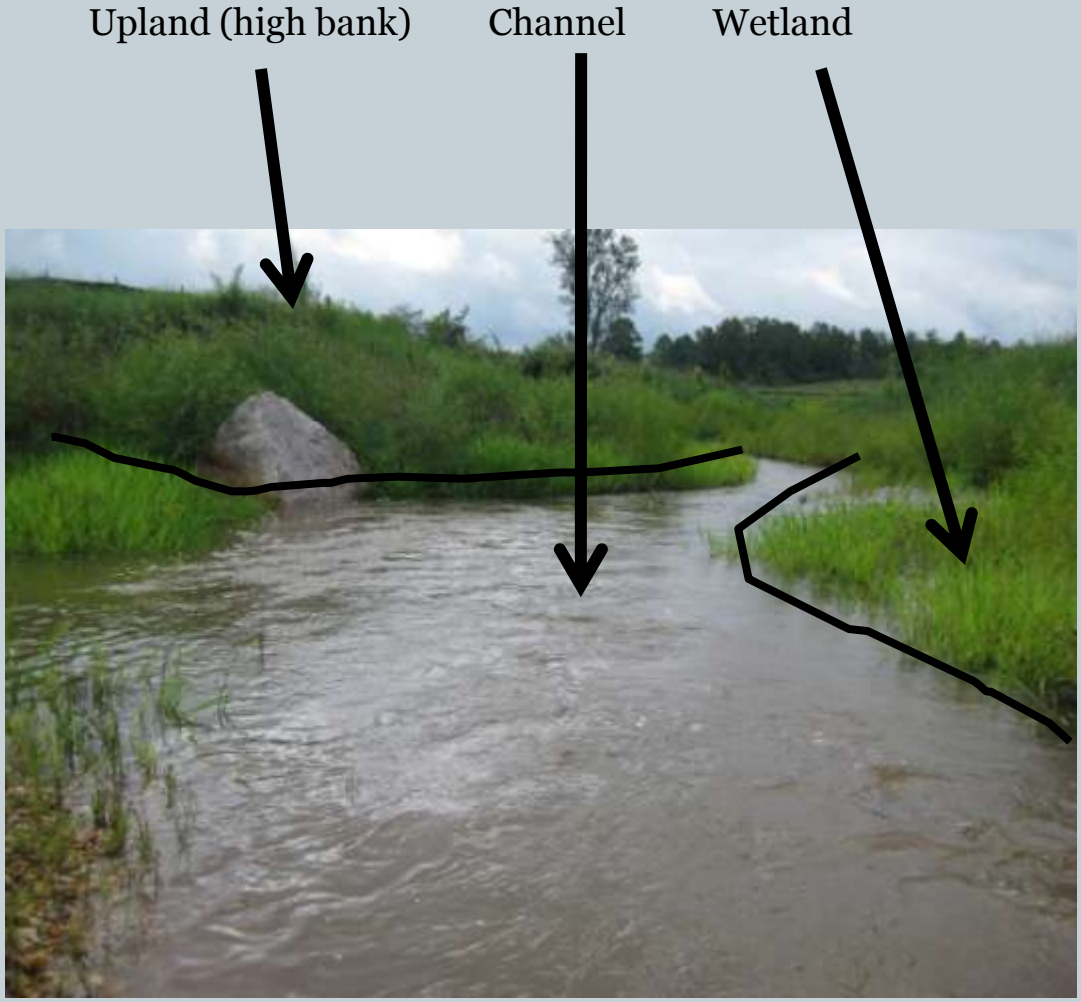
Riparian wetland

Channel of stream

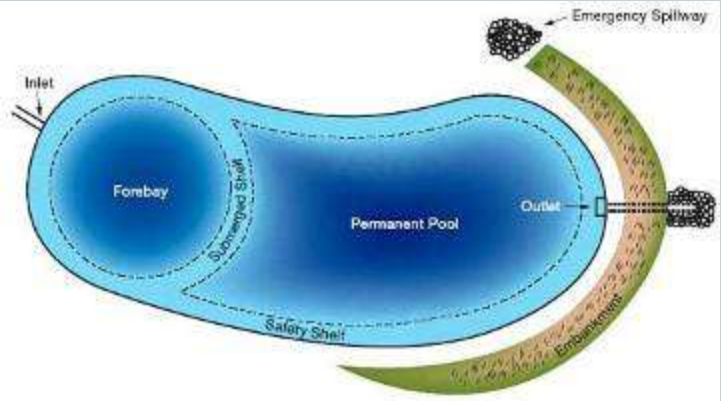


Slow flow, stagnation, lack of pool-channel complexes, organic bottom

Wetland, Creek, Stream, Ditch, Lake



Stormwater Ponds & WCA



Is a Stormwater Pond a Wetland?

It depends:

- Does it have hydric soils? (most ponds do)
- Does it have wetland hydrology? (most ponds do, although infiltration basins probably do not)
- Does it have hydrophytic vegetation? (some do not have any vegetation, but this parameter can be assumed based on soils and hydrology)
- Is it less than 6.6 feet deep? (some areas might be, others may not be)

So if it meets the definition of a wetland, it is a wetland

- It is subject to all of the rules and regulations of the Wetland Conservation Act.

Incidental Wetlands

- WCA does not regulate wetlands that were "incidentally" created.
- Many contemporary stormwater ponds were created in former upland areas, thus are not regulated.
- However, there are also many stormwater ponds that were created in former wetland areas that are not incidental.
- **The burden of proof is on the applicant to show incidental (historic air photo review, old plans, etc.)**

Are there any regulations unique to stormwater ponds?

Yes!

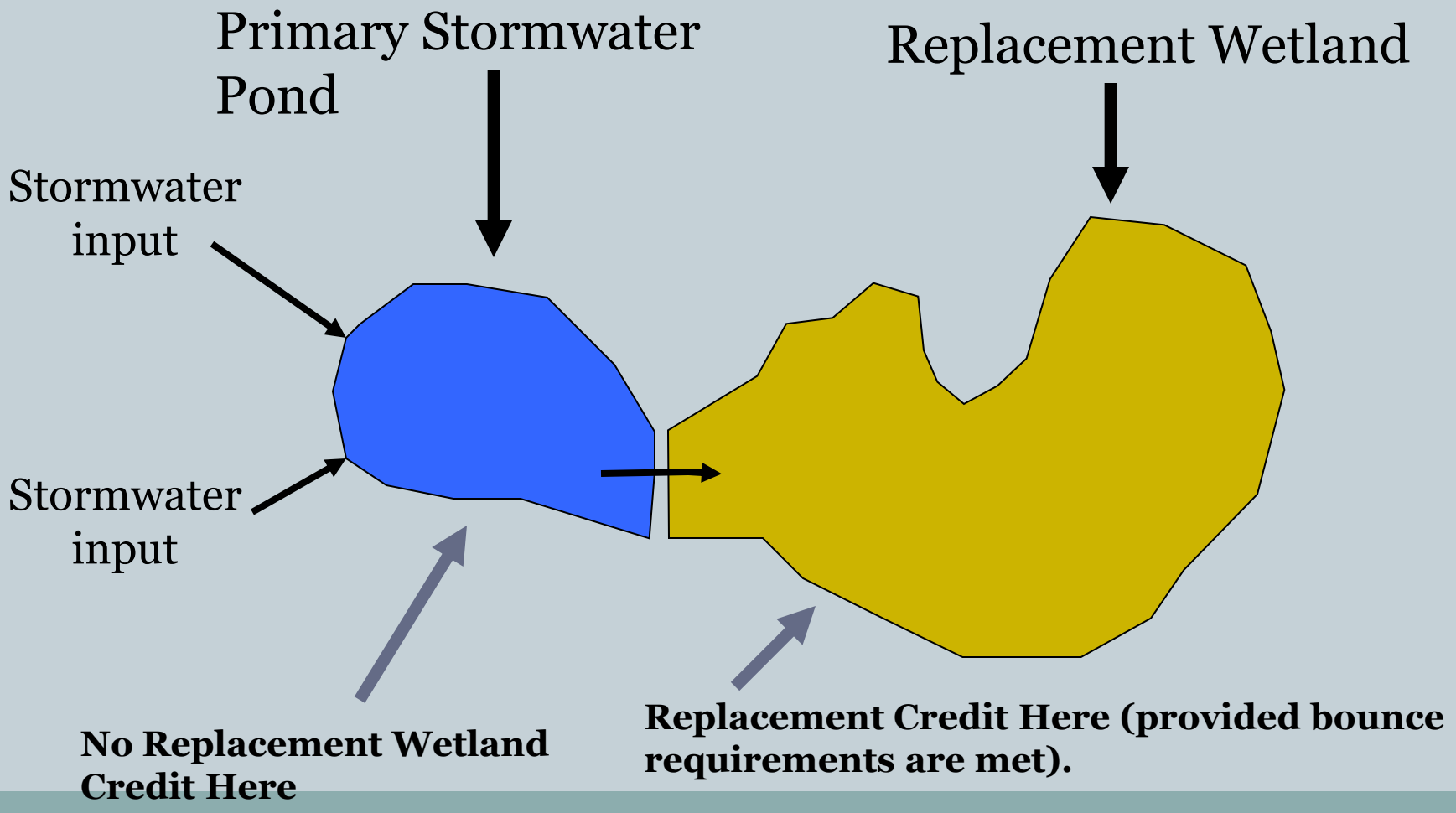
- Deposited sediment can be excavated from stormwater ponds and wetlands utilized for stormwater management without replacement (i.e. mitigation).
- Applicant must provide data showing the depth and location of accumulated sediment.
- Excavation beyond accumulated sediment may require wetland replacement for the area (square footage) of the proposed excavation depending on wetland type.

Can stormwater ponds be used for wetland replacement?

NO!

- Older WCA rules allowed for some limited replacement credit for stormwater ponds. That is no longer the case.
- Replacement wetlands must be separated from stormwater ponds with pretreatment of runoff required before discharge into the replacement wetland.
- Replacement wetlands receiving overflow from stormwater ponds must be designed for a maximum 2 foot rise for the 10-year storm event.

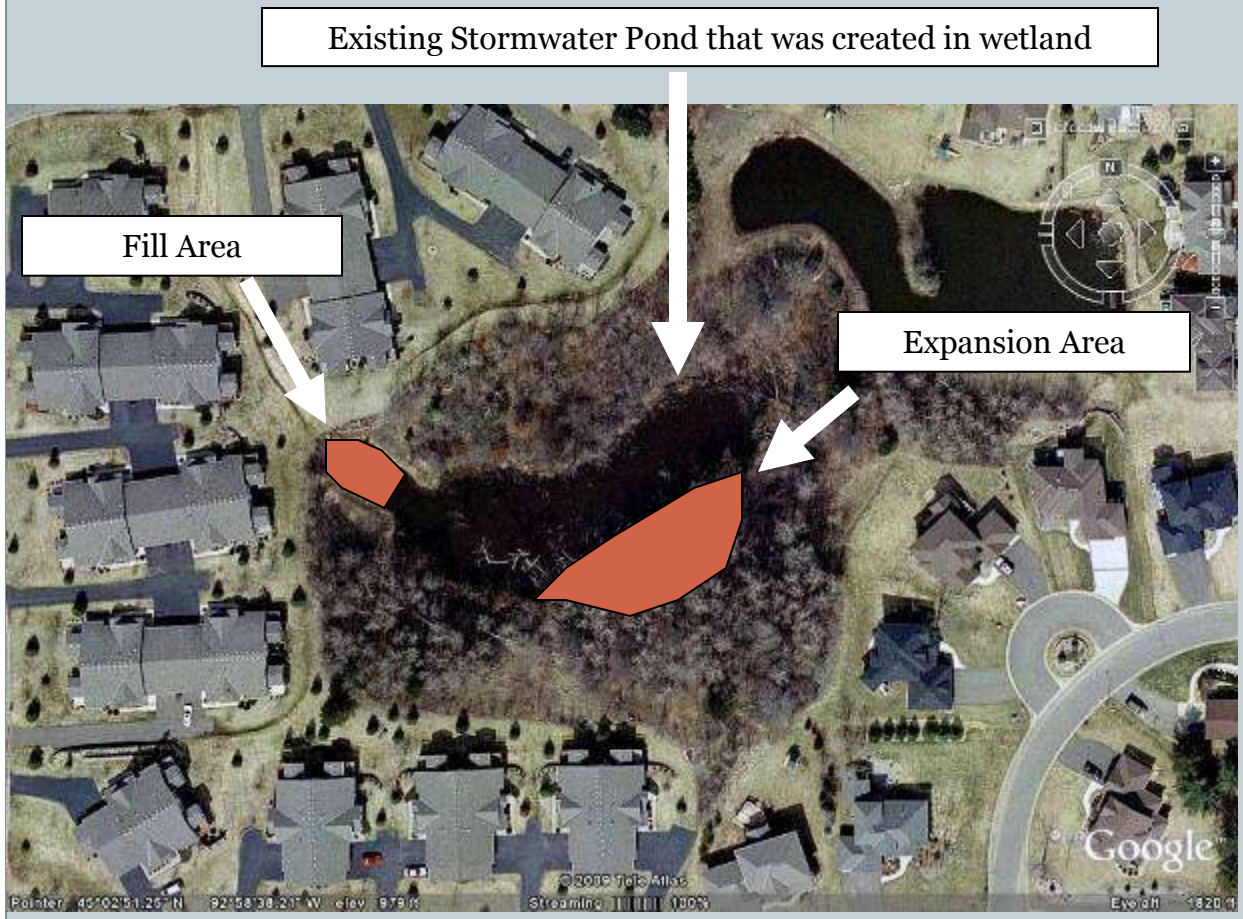
Schematic of Replacement Wetland in Stormwater System



Other Regulatory Considerations

- WCA requires the local government to consider the long-term viability of avoided wetlands when evaluating project plans.
  - In urban settings the re-routing of runoff and developing and maintaining stormwater features may have adverse effects on existing wetlands. Assessing before and after runoff volumes and discharge rates for different storm events (1, 2, 5, 10, etc.) may be necessary.

Let's look at some example projects



Project not valid.

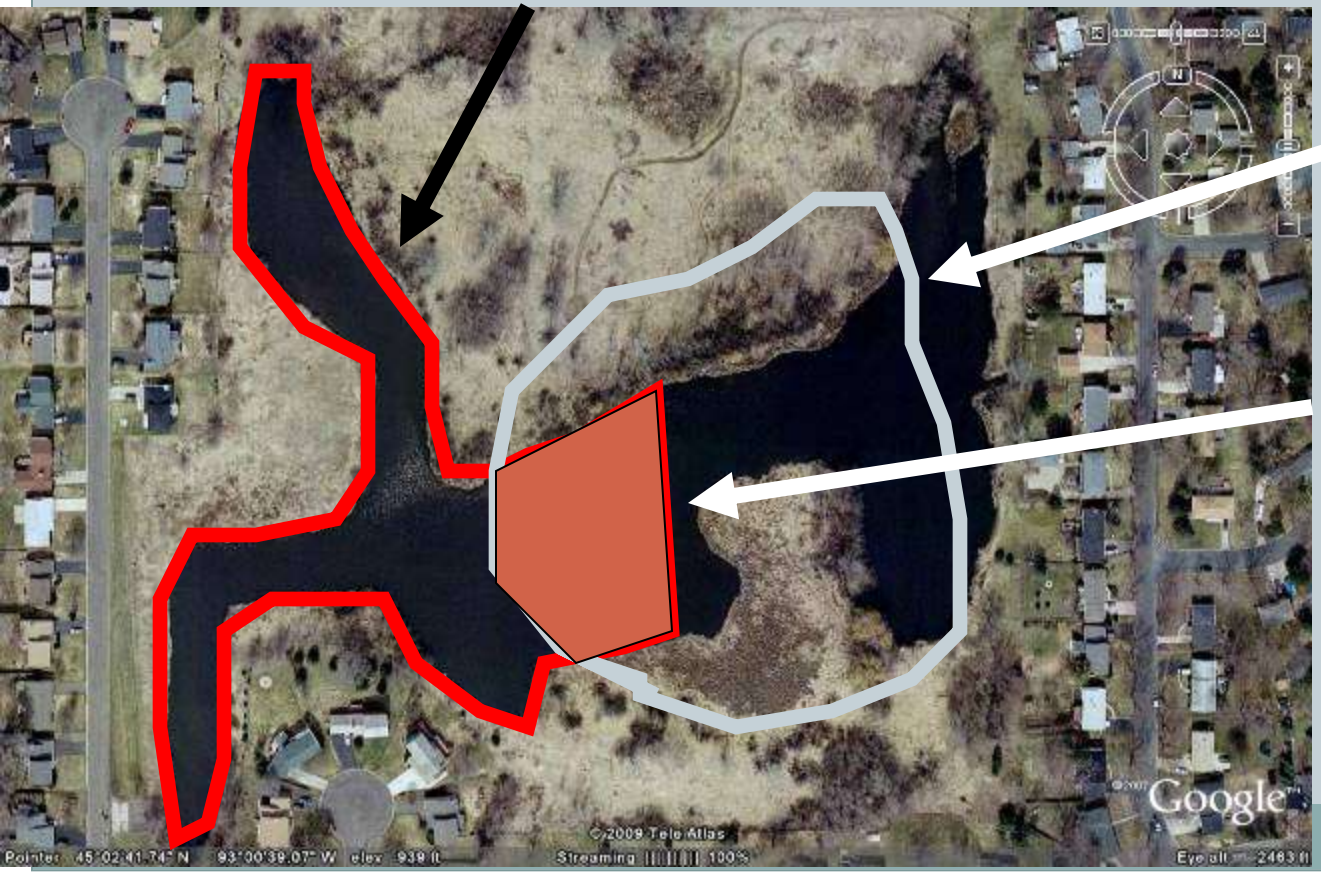
Expansion of stormwater pond cannot be used to replace a wetland impact even if it is to a stormwater pond.

Replacement wetland must be separated from the storm water pond.

Pond Alteration Example

Existing Stormwater Pond

Area in red proposed to be filled.



Historic wetland boundary outlined in blue (based on air photo review and old plans).

Wetland Replacement required for this area only.

Stormwater Pond Maintenance Example

Proposal is to excavate approximately 4 feet of soil from Ponds A, B, and C

What questions do we ask?

Stormwater Pond Maintenance Example

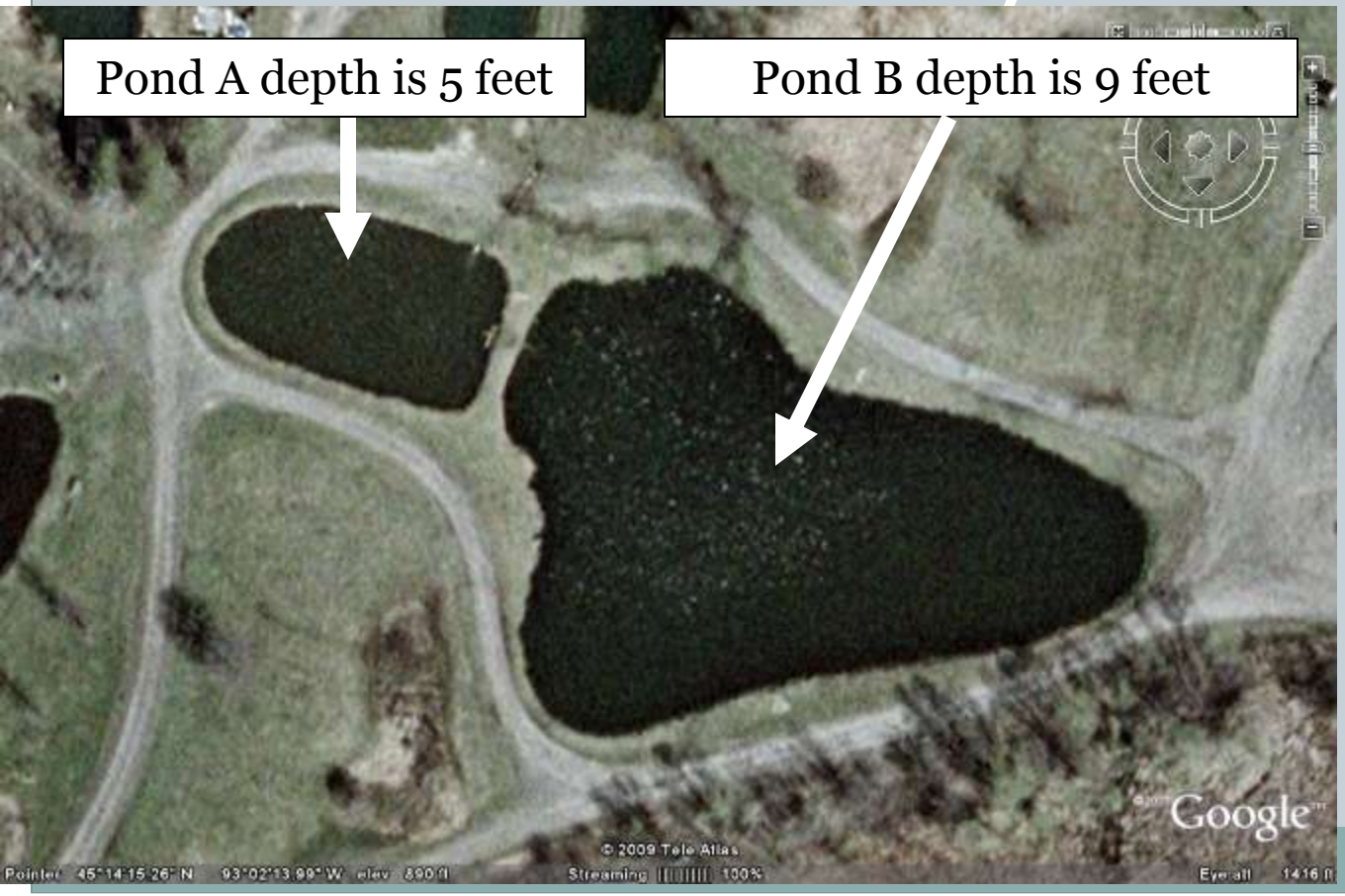
Ponds constructed in wetland or upland?

Let's say A was in wetland and B and C were in upland.

So excavation in B & C does not require replacement, but excavation in A is limited to accumulated sediment or else a wetland replacement plan would be required.

Deepwater Habitat Example

2 Stormwater Ponds proposed to be filled



Pond B is a deepwater habitat (not a wetland) and is not subject to WCA replacement requirements.

Pond A is a wetland, and filling it would require a wetland replacement plan.

Summary

- If a stormwater pond meets the definition of a wetland, it is a wetland subject to WCA rules.
- If a stormwater pond is created in an upland, then it is not regulated by WCA (burden of proof on the applicant)
- Accumulated sediment may be removed from active stormwater pond under the "no-loss" provision of WCA.

Summary (cont.)

- **Stormwater ponds *cannot* be used for wetland replacement (even if the impact is to a stormwater pond). See WCA requirements for maintaining separation of replacement wetlands and stormwater ponds.**

Public Road Projects

Public Road Projects

Who is the LGU for public road projects:

- If project qualifies for the Local Govt. Road Wetland Replacement Program (LGRWR), there is no LGU. TEP determines eligibility for program and signs off.
- If project does not qualify, then LGU is the same as with any project.
- If project is in MnDOT right-of-way, then MnDOT is the LGU.

Public Road Projects

What is the Local Govt Road Wetland Replacement Program (LGRWR)?

- BWSR provides replacement for wetland impacts associated with qualifying road projects conducted by City, County and township road authorities (as long as the legislature provides the funding to do so).

Public Road Projects

What is a qualifying project for the LGRWR program?

- *Cannot* involve new roads or roads expanded solely for additional traffic capacity lanes (unless needed for safety based on existing traffic volumes).
- Must involve a currently serviceable, existing, public road.
- Project purpose must be to meet State or Federal design & safety standards or requirements.

Public Road Projects

What is a qualifying project for the LGRWR program?

- Must minimize wetland impacts.
- Must consider replacing important wetland functions onsite.
- Must provide project-specific information to TEP and banking administrator 30 days prior to start of construction. For impacts <10,000 sf for emergency purposes, submit information within 30 days of impact.

Public Road Projects

Failure to follow process means disqualification for program and requires road authority to submit replacement plan application to LGU.

What if you don't know if it qualifies for the program?

- Submit project information to LGU and TEP for a determination of qualification (pre-appl TEP). If no, then LGU processes like replacement plan (notice of application, etc.). If yes, then TEP signs and no action required by LGU.

Public Road Projects

Note: Road authorities may purchase credits from BWSR (when available) if they do not qualify for the LGRWR program.

Public Road Projects

The road authority is responsible for making sure the paperwork (TEP-signed form for road program qualification) gets to the BWSR banking coordinator for processing.

Public Road Projects

What happens once the paperwork is submitted to BWSR?

- Banking administrator debits appropriate amount of credits from existing BWSR road banks utilizing siting criteria and appropriate replacement ratios.

- Projects awaiting debiting and those that have been debited are posted on BWSR website. Project information listed includes impact amount, impact type, replacement amount, replacement type. Further details available from BWSR banking administration (Dan Girolamo, Natasha DeVoe, Char Sokatch, Sarma Straumanis).

Replacement Noncompliance

Replacement Noncompliance

What can be done if applicant fails to comply with replacement plan requirements?

- Order specific <u>corrective actions</u>
  - Should be done early during monitoring period
  - May need TEP's technical input

Replacement Noncompliance

- Order applicant to prepare and implement new replacement plan.
- Request SWCD and DNR to issue restoration order for impacted wetlands.
  - May not be feasible for completed projects where development is extensive and/or successful restoration is unlikely.
- Use financial assurance
  - Not feasible if too little money to replace lost functions and value.

Replacement Noncompliance

- Pursue district court order to require applicant to fulfill replacement plan.
- DNR Enforcement can file deed restriction on parcel until replacement is accomplished

Replacement Noncompliance

What if LGU does not get monitoring report?

- WCA rule says LGU must pursue enforcement actions or prepare report for the applicant. LGU can charge fees to prepare report for applicant and/or utilize financial assurance.

Replacement Noncompliance

Enforcement Issues:

- Work closely with DNR enforcement officer and keep them in the loop.
- TEP findings supporting enforcement actions pursued by the LGU are useful.
- Keep good records on enforcement actions and attempts to get applicant to comply.
- If Corps has jurisdiction, keep them in the loop to avoid overlapping enforcement actions.


Thanks for your
attention!